

SYSTEM AND METHOD FOR AUTONOMOUS DATA SCRUBBING IN A HARD DISK DRIVE

ABSTRACT OF THE DISCLOSURE

A RAID subsystem with a plurality of hard disk drives has each disk controller autonomously executing data scrubbing on its disks instead of requiring the RAID controller to execute data scrubbing. The data scrubbing may be interrupted upon an I/O request from the RAID controller, or it may continue if a guaranteed scrub rate is not being achieved. Data is stored in large bands of concentric data tracks, and a band may be preferentially selected for scrubbing based on frequency of reading the band, or recency of writing to the band.